



- Available on PCI bus architecture
- Upto 2 measurement and 6 simulation channels on single card
- Common On-board Oscillator for reference signal generation

SIMULATION FUNCTION

- Output Amplitudes 11.8 Vrms L-L for Synchro or Resolver for Simulation function
- Optional Transformer Isolation
- Programmable Two-Speed Ratio
- DLLs and Libraries for Windows 2000/XP, Linux, RT-Linux are available

MEASUREMENT FUNCTION

- Internally Synthesized Reference
- Software programmable 10-, 12-, 14- or 16-bit resolution
- Input amplitudes: 2 Vrms L-L, 11.8 Vrms L-L, or 90 Vrms L-L
- Incremental Encoder Emulation or Velocity Output
- Transformer isolation for all input channels

OVERVIEW

The AT Synchro/Resolver products provide fully independent Synchro/Resolver-to-Digital and fully independent Digital-to-Synchro/Resolver channels. These are available on PCI bus add-on card. Each channel is implemented using DDC converters. A common on-board oscillator eliminates the need for an external reference oscillator. Transformer isolation is available on-board for measurement channels while it is optional for simulation channels. The cards are available in various combinations. Up to 2 measurement (Synchro/Resolver-to-Digital) Channels and 6 simulation (Digital-to-Synchro/Resolver) Channels can be configured. The S/R-D products can be used as Synchro/Resolver simulator to test the equipment, which has Synchro/Resolver interface in it. The D/S-R products can be used for angular measurement applications.

Hardware

The card is capable of accommodating most military voltages; e.g., 11.8, or 90 Vrms @ 400 Hz. This architecture allows for minimum board count to achieve the maximum functionality in systems that require precision positioning, control and stabilization. Each input channel of S/R-D is independent and maybe configured as either a Synchro or Resolver input using on-board jumpers. Each output channel of D-S/R is independent and maybe configured as either a Synchro or Resolver output using on-board jumpers.

The AT-PCI-SRC software includes

- > Virtual Instrument Panels
- > Drivers & APIs

Virtual Instrument Panel

The AT-PCI-SRC card comes with a "Virtual Instrument Panel" providing interactive control of Synchro/Resolver features. The control interface appears on the computer display & user manipulates these controls with a mouse/trackball or keyboard. The purpose of Virtual Instrument Panel is to help the user (mostly system integrators) to quickly setup & use the card, just like a stand-alone instrument with physical front-end knobs, controls & display without getting into programming intricacies.

Drivers & APIs

The AT-PCI-SRC card comes with a powerful set of library functions to access the Synchro/Resolver functionality. The drivers are designed in a modular fashion consisting of component functions & application functions. The user's test program can be developed with a few calls to the card driver, by using the set of application functions provided. Drivers and high-level API libraries for Windows 2000/XP, Linux, RTLinux are provided for the PCI card.

AT-PCI-SRX-M2S6

Synchro/Resolver Measurement and Simulation Card

PRODUCT SPECIFICATIONS

Synchro/Resolver to Digital

- Channels: Up to 2 channels
- Resolution: Programmable 10-, 12-, 14-, 16- bit
- Accuracy: 2 arc-minute
- Inputs: Jumper selectable S/R inputs
- Reference: Separate external reference for each channel
- Speed: Programmable speed ratios
- Frequency: 400 Hz

Digital to Synchro/Resolver

- Channels: Up to 6 channels
- Resolution: 16-bit
- Accuracy: 1arc-minute
- Outputs: Jumper selectable S/R signal outputs
- Isolation: Optional Transformer isolation
- Speed: Programmable speed ratios
- Frequency: 400 Hz
- Output Drive: 1.2 VA

Others

- Wrap around self-test provided
- Built-in tests for all I/O channels provided

Software Support

- Windows 2000/XP, Linux, RT-Linux

Physical

- Dimensions: 313 mm x 100 mm

Environmental

- Operating Temperature: 0°C to 50°C
- Storage Temperature: -20°C to 70°C

Warranty

- 1 year limited warranty

ORDERING INFORMATION

Hardware Selection

AT-PCI-SRX-Measurement Channel- Simulation Channel

1 = 1 Channel
2 = 2 Channels

1 to 6 Channels (Substitute with number of channels)

X = M - S/R - To - Digital
X = S - Digital To - S/R
X = C - Combination

- Contact sales for support for other Operating Systems
- Contact sales for configuration of front and rear I/O configuration
- Contact sales for environmental options



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